

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/052,147	YING ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Huyen X. Vo	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/7/2006.
2. ☒ The allowed claim(s) is/are 1-5, 8-10, 12-15, 17-20, 22-23, and 25-26.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

**DETAILED ACTION**

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with applicant's representative, Mr. Vincent Lue, on 6/23/2006. The application has been amended as follows:

**Claims 10 has been amended as follows:**

Claim 10, line 2, delete "POS" and insert after particular --part of speech (POS)--.

Claim 10, line 3, delete "RNN network" and insert after particular --recurrent neural network (RNN)--.

**Claims 23 has been amended as follows:**

Claim 23, line 3, delete "POS" and insert after particular --part of speech (POS)--.

Claim 23, line 4, delete "RNN network" and insert after particular --recurrent neural network (RNN)--.

***Allowable Subject Matter***

2. Claims 1-5, 8-10, 12-15, 17-20, 22-23, and 25-26 are allowed over prior art of record. The following is a statement of reasons for the indication of allowable subject matter: Chen et al. teach a method of using a RNN to determine prosodic features for use in a TTS system (*referring to reference*). Yamaguchi et al. teach steps of extracting a clause/phrase boundary and classifying words according to part-of-speech numbers of words which form inputted sentence information. Then, an input pattern representing part-of-speech numbers of a target word is checked to determine whether a clause/phrase boundary exists before or after the target word; a plurality of words before and after the target words is then applied to a neural network. Among units in the output layer of the neural network, a unit having the output larger than a threshold is determined to refer to a clause/phrase boundary of the target word. Upon extracting a subject-predicate boundary, words are classified in word number, and an input pattern corresponding to a plurality of words are applied to the neural network. The neural network comprises output units for a subject and a predicate, and a boundary is extracted by an inputted pattern, which changes the output of these units (*referring to reference*). Both Chen et al. and Yamaguchi et al. fail to specifically disclose inputting a first phrase break to a first input of the RNN network, inputting a first POS tag from the sequence to a second input of the RNN network, wherein the first POS tag is associated with the first phrase break, inputting a second phrase break to a third input of the RNN network, inputting a second POS tag from the sequence to a fourth input of the RNN network, wherein the second POS tag is associated with the second phrase break, and

wherein the second POS tag is next to the first POS tag in the tag sequence, and inputting the particular POS tag to a fifth input of the RNN network. Furthermore, it would have not been obvious to one of ordinary skill in the art at the time of invention to modify Chen et al. and/or Yamaguchi et al. in order to obtain the claimed invention. Therefore, claims 1-5, 8-10, 12-15, 17-20, 22-23, and 25-26 are allowed over prior art of record.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen X. Vo whose telephone number is 571-272-7631. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

  
RICHEMOND DORVIL  
SUPERVISORY PATENT EXAMINER